REMARKS/ARGUMENTS

The application contains claims 1 to 36. No claim amendments have been made. In view of the following remarks, applicants respectfully requests reconsideration of the application.

Claims 1 to 36 were rejected by the Examiner under 35 USC §103 in view of US Patent 6,229,540 ("Tonelli") and US Patent Publication 2002/0049693 A1 ("Gase").

Since all independent claims (1, 12, 17, 22, and 32) are directed to various forms of configuration management according to the present invention, they will be addressed collectively.

A *prima facie* case of obviousness is established when the Examiner provides: one or more references; that were available to the inventor and that teach a suggestion to combine or modify the references, where the combination or modification of which would appear to be sufficient to have made the claimed invention obvious to one of ordinary skill in the art.

As a representative example of the Examiners position refer *inter alia* to page 2 of the Office Action:

> "*It is clear from the disclosure, that the purpose of the reference is to be able to discover/collect a present network configuration, to be able to make changes to the "virtual" version of the target network in the computer hosted software version, so as to be able to verify any changes against applicable design rules.*"

Teaching of Reference

Applicant submits that the teaching of Tonelli is not directly related to the present invention as described and claimed. In particular, Tonelli is not a configuration system *per se*. It is incidental that similar words are used in Tonelli to that of the present invention, but the core teaching of Tonelli is not the same. For example, Tonelli teaches auditing a complete network to obtain information about each device; a network design sheet is generated, device icons representing intelligent device objects are placed on the design sheet; a media type is selected (that represents a media object); the media type is connected to a device icon and a validation of this connection is performed. In order to perform this "validation" information stored in the device database is used, *"the network design software determines whether the connection is valid."* (col.8 l.66 – col.9 l.1) Tonelli mentions "configuration", but this is not configuration of the target system but rather configuration of the device characteristics within the design tool.

Applicant further submits that the stated objectives of Tonelli reinforce applicant interpretation of Tonelli thereby failing to support the obviousness rejection. In particular, Tonelli states (at col. 2 l.18-23): *"An important aspect of designing and maintaining networks is being able to quickly assess the current network configuration down to the device configuration level. Such information is helpful in troubleshooting network problems and in updating a network system. Network documentation is typically created manually at great effort."* Clearly, Tonelli is focused on a different problem. The present invention is interested in ensuring configuration of a target system with a batch-update process using a virtual system for rules based validation.

Combined Teaching

Applicant submits that combining the teachings of Tonelli and Gase in the manner proposed is incorrect. Firstly, there is no suggestion to combine or modify the references as proposed by the Examiner and secondly, even if the teachings of both references were contemplated the result would not be the presently claimed invention.

<u>Suggestion to Combine</u>

Applicant submits that there is no reason, suggestion, or motivation from Tonelli (or Gase) as a whole for a person of ordinary skill in the art to have combined and/or modified Tonelli (or Gase) in the manner suggested by the Examiner to reach the claimed invention. It is clearly established law that obviousness cannot be established by combining the teachings of prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination. In fact, the Patent Office has applied this standard in *Ex parte* Skinner, 2USPQ2d 1788, 1790 (B.P.A.I. 1986): "*When the incentive to combine the teachings of the reference is not readily apparent, it is the duty of the examiner to explain why combination of the reference teachings is proper.... Absent such reasons or incentives, the teachings of the reference are not combinable.*"

Applicant submits that there is no guidance in Tonelli to direct a person skilled in the art to consider a batch update process since Tonelli is not even concerned about updating parameters of a target system after appropriate validation in a virtual system. Tonelli is concerned with overall changes to a network topology for comparison purposes after a change is made: "*... allows a user to compare the network configuration discovered by the audit software with a previously generated network configuration.*" (col. 22 l. 8-11). The same is true in reverse as Gase provides no guidance regarding establishing a virtual system of the target system such that configuration based changes to a group of individual devices can be pre-validated in the virtual system prior to batch updating. In particular, Gase solves a very particular problem: "*... a method and apparatus which allows a network administrator to both remotely initially configure one or more network devices and to simultaneously configure a group of network devices remotely...*" (para. [0005])

Although Tonelli and Gase make references to networks, components, configuration and validation, this is merely incidental due to the nature of the subject matter and neither reference suggests that these various "fields" be combined to overcome the different problem as address by the elements/steps claimed in the present invention. The suggestion of how to arrange the elements is the manner claimed also must be considered. Neither reference teaches a configuration system/method that includes

providing a virtual system to emulate the behavior of a target system (as defined by the interface of the target system); collecting and validating a change to the system through the virtual system and then applying the change(s) in a batch mode to the target system in the manner of the present invention.

In summary, there is no reason, suggestion or motivation from either Tonelli or Gase for a person of ordinary skill to have combined or modified the references. The fact that there is a general relationship (computers, networks) between the fields of the cited references to be combined is insufficient to suggest the motivation. Finally, even if a combination of the cited references were possible the resulting combination or modification would not show or suggest the claimed invention as detailed below.

For example, the references cited do not teach or suggest (either singly or in combination) a configuration system/method that includes, *inter alia*:

> "...*virtual system ... including (i) a collection tool supporting the interface of the target system and (ii) an application tool for applying the changes of the plurality of parameters ... to the target system*" (subject matter reflected in independent claim 1)

OR

> "...*providing a virtual system to emulate behavior of the target system as defined by the interface of the target system; collecting and validating ... by application to the virtual system; and applying ... change in a batch-mode to the target system*" (subject matter reflected in independent claims 12 and 17)

OR

> "*a virtual system ... to emulate functionality of the target system; a collection system interacting with the virtual system...; an application system for applying ... to the target system in a batch-mode.*" (subject matter reflected in independent claims 22 and 32)

Tonelli merely provides for a "virtual representation" of a network that does not include tools/functions that are analogous to the claimed collection tool and application tool. The Tonelli virtual representation is incapable of supporting the interface of a target system let alone having tools to actually apply changes (in a batch mode) to the target system. Other than the initial "auditing" step in Tonelli the interaction with the actual target system is non-existent. Further, Tonelli only contemplates individual device interaction in the virtual representation not complete target system configuration with multiple parameters changes where parameter changes to one device could effect another device's operation within the target system.

The virtual representation of Tonelli does not emulate behavior of the target system but rather of individual components in the network. Tonelli does not actual teach changing the configuration of the actual target devices – the virtual representation only advises the user that a new device location within the network is valid. See, for example, col. 8 l.66-col.9 l.1 and col. 6. l.55-60): "*Using information stored in the device database, the network design software determines whether the connection is valid.*" Where "*The device database is a relational database of templates that represent objects including personal computers (PCs), routers, ..., such that each instantiation accurately reflects the characteristics of the corresponding network device.*"

The Examiner then attempts to rely on Gase to illustrate a batch update process to support the short comings in the Tonelli teachings. Refer to page 3 of the Office Action where the Examiner states *inter alia*: "*What is lacking is the actual batch mode application of the changes to the actual target network. Gase teaches the use of a batch mode update to apply configurations to a group of network devices...*" The batch-mode update of Gase is a system where a group of like devices can be updated simultaneously from a single computer. The batch-mode update function of the present invention deals with applying changes to parameters of a target system to ensure proper target system operation– not simultaneous similar changes to multiple identical devices for the purposes of initial configuration or batch configuration changes as discussed in Gase.

In particular, Gase does not consider in the "batch" update process the co-operative effects of multiple devices and how changes to one device would effect the overall system – only single device operation are considered. See for example, para [0019] "...*sends the setting changes to a first device from the group of selected devices...*" and para [0020] "...*a single transmission by configuration engine 25 can contain more than a single setting change so that multiple settings can be changed essentially simultaneously.*" It is important to note that this later reference refers to "multiple settings" for a single device.
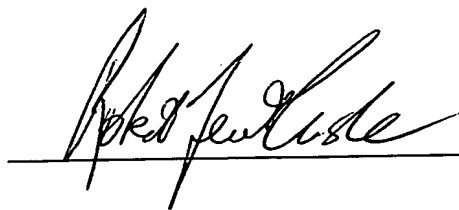
In summary, even if a combination of the cited references were possible Applicant fails to see how the resulting combination or modification would show or suggest the presently claimed invention.

In view of the above comments, Applicants respectfully submit that the independent claims (1, 12, 17, 22, and 32) and all of the associated dependent claims are allowable.

CONCLUSION

Applicant respectfully submits that the present application is in condition for allowance and requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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